

WHAT IS CLAIMED IS:

1. A method for logging voice quality issues,
comprising:

receiving a signal from a user for logging quality
5 information for a packet switched voice connection at an
endpoint of the voice connection;

collecting voice samples from the voice connection
at the endpoint; and

storing the voice samples in an error log at the
10 endpoint.

2. The method of Claim 1, further comprising
maintaining the error log at the endpoint.

15 3. The method of Claim 1, wherein the signal
comprises a locally initiated signal.

4. The method of Claim 1, further comprising:
collecting system parameters indicative of quality
20 of the voice connection at the endpoint; and
storing the system parameters in the error log at
the endpoint.

5. The method of Claim 4, further comprising
25 maintaining the error log at the endpoint.

6. The method of Claim 4, further comprising
associating system parameters corresponding in time to a
voice sample with the voice sample in the error log.

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7. The method of Claim 4, wherein the system parameters comprise a plurality of lost/late packet counts, convergent state of echo cancelers, number of packets stored in a jitter buffer and end-to-end latency
5 of the voice connection at the endpoint.

8. The method of Claim 1, wherein the endpoint is a first endpoint, further comprising signaling a second endpoint to the voice connection to log quality
10 information for the voice connection at the second endpoint, the quality information including voice samples from the voice connection at the second endpoint.

9. The method of Claim 8, further comprising
15 identifying the second endpoint at the first endpoint.

10. The method of Claim 9, further comprising:
opening a control channel to the second endpoint;
and
20 signaling the second endpoint to log quality information over the control channel.

11. The method of Claim 10, wherein the second endpoint comprises a gateway to a public switched
25 telephone network (PSTN).

12. A system for logging voice quality issues,
comprising:

means for receiving a signal from a user for logging
quality information for a packet switched voice
5 connection at an endpoint of the voice connection;

means for collecting voice samples from the voice
connection at the endpoint; and

means for storing the voice samples in an error log
at the endpoint.

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13. The system of Claim 12, further comprising
means for maintaining the error log at the endpoint.

14. The system of Claim 12, wherein the signal
15 comprises a locally initiated signal.

15. The system of Claim 12, further comprising:

means for collecting system parameters indicative of
quality of the voice connection at the endpoint; and

20 means for storing the system parameters in the error
log at the endpoint.

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16. The system of Claim 15, further comprising
means for maintaining the error log at the endpoint.

17. The system of Claim 15, further comprising
associating system parameters corresponding in time to a
voice sample with the voice sample in the error log.

18. The system of Claim 15, wherein the system parameters comprise a plurality of lost/late packet counts, convergent state of echo cancelers, number of packets stored in a jitter buffer and end-to-end latency
5 of the voice connection at the endpoint.

19. The system of Claim 12, wherein the endpoint is a first endpoint, further comprising means for signaling a second endpoint to the voice connection to log quality
10 information for the voice connection at the second endpoint, the quality information including voice samples from the voice connection at the second endpoint.

20. The system of Claim 19, further comprising
15 means for identifying the second endpoint at the first endpoint.

21. The system of Claim 20, further comprising:
means for opening a control channel to the second
20 endpoint; and
means for signaling the second endpoint to log quality information over the control channel.

22. The system of Claim 21, wherein the second
25 endpoint comprises a gateway to a public switched telephone network (PSTN).

23. A system for logging voice quality issues, comprising:

logic encoded in media; and

the logic operable to receive a signal from a user
5 for logging quality information for a voice connection at
an endpoint of the voice connection, collect voice
samples from the voice connection at the endpoint and
store the voice samples in an error log at the endpoint.

10 24. The system of Claim 23, the logic further
operable to maintain the error log at the endpoint.

25. The system of Claim 23, wherein the signal
comprises a locally initiated signal.

15 26. The system of Claim 23, the logic further
operable to:

collect system parameters indicative of quality of
the voice connection at the endpoint; and
20 store the system parameters in the error log at the
endpoint.

27. The system of Claim 26, the logic further
operable to maintain the error log at the endpoint.

25 28. The system of Claim 26, the logic further
operable to associate system parameters corresponding in
time to a voice sample with the voice sample in the error
log.

29. The system of Claim 26, wherein the system parameters comprise a plurality of lost/late packet counts, convergent state of echo cancelers, number of packets stored in a jitter buffer and end-to-end latency
5 of the voice connection at the endpoint.

30. The system of Claim 23, wherein the endpoint is a first endpoint, the logic further operable to signal a second endpoint to the voice connection to log quality
10 information for the voice connection at the second endpoint, the quality information including voice samples from the voice connection at the second endpoint.

31. The system of Claim 30, the logic further
15 operable to identify the second endpoint at the first endpoint.

32. The system of Claim 31, the logic further operable to:
20 open a control channel to the second endpoint; and
signal the second endpoint to log quality information over the control channel.

33. The system of Claim 32, wherein the second
25 endpoint comprises a gateway to a public switched telephone network (PSTN).

34. A method for logging voice quality issues, comprising:

receiving a signal initiated by a user at an endpoint indicating voice quality degradation of an
5 ongoing voice connection;

collecting voice samples from the voice connection at the endpoint;

collecting system parameters indicative of quality of the voice connection at the endpoint, the system
10 parameters corresponding in time to the voice samples;

synchronizing the system parameters with the voice samples; and

storing the voice samples and system parameters synchronously in an error log at the endpoint.
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35. The method of Claim 34, wherein the endpoint comprises a first endpoint, further comprising:

identifying a second endpoint of the voice connection;

20 opening a control channel to the second endpoint; and

signaling the second endpoint over the control channel to log quality information for the voice connection at the second endpoint.
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36. The method of Claim 34, wherein the system parameters comprise a plurality of loss/late packet counts, conversion state of echo cancelers, number of packets stored in a jitter buffer, and end-to-end latency
30 of the voice connection at the endpoint.

37. The method of Claim 34, wherein the voice connection comprises a voice over Internet protocol (VoIP) connection.

38. A method for logging voice quality issues, comprising:

receiving a signal from a user for logging quality information for a packet switched voice connection;

5 collecting voice samples from the voice connection at an endpoint of the voice connection;

collecting voice samples from the voice connection at a network node; and

storing the voice samples in disparate error logs.

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39. The method of Claim 38, further comprising maintaining an error log at the endpoint for locally collected samples.

15 40. The method of Claim 38, wherein the signal comprises a signal initiated at the endpoint.

41. The method of Claim 38, further comprising:

collecting system parameters indicative of quality

20 of the voice connection at the endpoint;

collecting system parameters indicative of quality of the voice connection at the network node; and

storing the system parameters in the error logs.

25 42. The method of Claim 41, further comprising associating system parameters corresponding in time to a voice sample with the voice sample in the error logs.

30 43. The method of Claim 41, wherein the system parameters comprise a plurality of lost/late packet counts, convergent state of echo cancelers, number of packets stored in a jitter buffer and end-to-end latency of the voice connection at the endpoint.

44. The method of Claim 38, wherein the endpoint is a first endpoint, further comprising signaling a second endpoint to the voice connection to log quality
5 information for the voice connection at the second endpoint, the quality information including voice samples from the voice connection at the second endpoint.

45. The method of Claim 44, further comprising
10 identifying the second endpoint at the first endpoint.

46. The method of Claim 45, further comprising:
opening a control channel to the second endpoint;
and
15 signaling the second endpoint to log quality information over the control channel.

47. The method of Claim 46, wherein the second endpoint comprises a gateway to a public switched
20 telephone network (PSTN).